Cough Due to Worms

A reader fails to understand how cough can be caused by worms and would like to have some information on this score. It certainly does seem strange that cough should come from worms in the intestines or stomach, but such is the case in some instances. Indigestion causes formation of gas and gas distension of the stomach, which may press upon the diaphragm or otherwise distend organs so that the diaphragm is interfered with, in which case cough and vomiting might be induced. At the same time there is irritation and sometimes inflammation of the mucous lining of the digestive organs, and where this is present, distant mucous membrane may become affected sympathetically or nerves may be irritated sufficiently to produce cough. Lastly, where indigestion causes vomiting or eructation of gas, food may find its way into the entrance of the windpipe and induce coughing. Worms are, however, usually elsewhere than the stomach or intestines when they cause cough of an aggravated character in young pigs. The worms in these cases are found in the windpipe and air passages of the lungs and set up verminous bronchitis and cough. Until recent years this trouble was overlooked in swine, but recognized as a common disease of young calves and lambs. The worm giving rise to the disease is known as strongylus paradoxus and is a slender whitish or brown parasite measuring three-fourths of an inch to one and one-fourth inches long. The worm eggs are doubtless taken in on grass or in drinking water or mud and finally assume the shape of worms which may be found curled up in small nodules along the lining of the windpipe or in the air passages of the lungs. When the small air passages (bronchii) are invaded, parts of the lung become like liver, indicating pneumonia, and where this is the case the pig may die. The worms in any part of the breathing apparatus set up intense irritation, as they are foreign bodies. The mucous lining becomes inflamed and inflammatory products in the form of phleghm are coughed up. The affected pigs cough severely until this matter is raised and then have an easy spell. The cough is so troublesome that it has been considered whooping cough, but post-mortem investigation discloses the presence of the little worms. In making such a post-mortem there is some danger of confusing this worm disease with tuberculosis, for nodules are sometimes found in the lung tissues that appear to be characteristic of tuberculosis, but are really due to encysted worms and a cheesy material deposited about them. The microscope should be used in making examinations of the nodules referred to. Old hogs are not seriously affected, but young pigs either in spring or fall are liable to succumb to pneumonia consequent upon the presence of these worms in the lungs. When pigs are seen to suffer from a coughing disease suggestive of croup or whooping cough without the throat being evidently sore and swollen, the worms referred to should be suspected, and the patients fed as generously as possible to keep them growing and assist in offsetting the ravages of the worm, for which no cure is practicable. Glyco-heroin in teaspoonful doses will greatly abate the cough if given three times daily or in increasing doses, if the first mentioned dose does not prove sufficient. Some good is also derived from fumigation in a close room. For this purpose sulphur is commonly used, but better results and less danger will attend the use of a mixture of equal parts of eucalyptus and oil of tar or compound tincture of benzoin, which may be generated by evaporating the mixture over an alcohol lamp. Occasional doses of turpentine or of one of the coal tar product dips or disinfectants such as we advertise usually tend to prevent all parasitic diseases of the internal organs, and the lung worm will be less troublesome where these remedies are used. It is also important to keep pigs away from pastures where affected swine have grazed and especially out of mud wallows or dirty, damp places. Such places are germs of all kinds and dangerous to the natural habitat of parasites and swine.—A. S. Alexander in Farmers' Review.

Save the Big Trees

Those who read President Roosevelt's message to Congress will remember that one of the things he recommended was an appropriation for the purchase and preservation of one or more of the groves of big trees, "Sequoia Gigantea," that still exist in California. William Russell Dudley, vice-president of the American Forestry Association, is greatly interested in the matter and recently urged it upon the attention of the Senate, in a communication addressed to that body. He prefaced his letter by saying that the facts transmitted had never before been published. He told of one felled tree which science had proved conclusively began its existence 525 years before Christ. Writing of the great trees in the Converse Basin, Mr. Dudley said: A remarkable recuperative power following an injury was found after an examination of the trees in this basin. The effects of certain tremendous forest fires occurring centuries ago were registered in the trunks of these trees, and the record was completely concealed by the subsequent healthy growth. Among a number of similar cases the most instructive record of these ancient forest fires was observed in a tree of moderate size—about fifteen feet in diameter five feet from the ground. It was 270 feet in height and 2,171 years old.

The history of the tree was as follows: B. C. 271 it began its existence. The first year of the Christian era it was about four feet in diameter above the base. A. D. 245, at 516 years of age, occurred a burning on the trunk three feet wide. One hundred and five years were occupied in covering this wound with new tissue. For 1,196 years no further injuries were registered. A. D. 1441, at 1,712 years of age, the tree was burned a second time in two long grooves, one and two feet wide respectively. Each had its own system of repair. One hundred and thirty-nine years of growth followed, including the time occupied by covering the wounds. A. D. 1580, at 1,851 years of age, occurred another fire, causing a burn on the trunk two feet wide, which took fifty-six years to cover with new tissue. Two hundred and seventeen years of growth followed this burn. A. D. 1797, when the tree was 2,068 years old, a tremendous fire attacked it, burning the great scar eighteen feet wide. One hundred and three years, between 1797 and 1900, had enabled the tree to reduce the exposed area of the burn to about fourteen feet in width. Mr. Dudley made a strong plea to the Senate to save the sequoia forests from the hands of the vandal Man, and in the last twelve words he puts the meat of the certain destruction matter when he says: "The trees will be cut by the lumbermen when it will pay."

Lands should be so well drained that in the spring, as soon as the frost is out of the ground, the water will not stand on the soil, but will quickly disappear. This will insure the land being ready for working at an early date.

American Bacon Abroad

It would seem advisable for American hog raisers to pay more attention to the production of high-class bacon, especially that to be shipped to the English market. Most of our bacon goes to the English market, and it is to the English taste that we must cater in the matter of quality. Also, it is true that the greater part of the bacon imported into England comes from the United States. But, as the Farmers' Review has pointed out before, the American product has never equaled in price the bacon made in Denmark, and is almost always lower in price than bacon from Canada, though that bacon does not compare favorably with bacon from Denmark. Sometimes the price for American bacon has been only half that of Danish bacon. During the past two or three years the quality of American bacon seems to have improved some, if we may judge of its standing in the English market. Either that or the exporters have been more careful in their selection of bacon to go abroad. We think the quality of the bacon in our local markets has also improved, as it is now easy to get bacon with layers of lean mixed with the fat. There seems to have been an improvement in our manner of feeding pigs and hogs. Although many of our people are still feeding corn, and corn only, the number is apparently decreasing, and the constant pounding away of the agricultural press and of our leading hog breeders and agricultural professors in this regard is having its effect. We have but to go on in the way we are now going to give the foreign market in a few years the kind of bacon it demands, and for which it is ready to pay a good price. The packers are indeed more carefully selecting than formerly as to the requirements of the foreign market, but there is also a wider range to select from. The Canadians are wider awake on this point than are we, and the leading professors of the agricultural college there are giving the matter a good deal of careful attention. As a result they have greatly increased their shipments of bacon during the past few years.—Farmers' Review.

Making Cottage Cheese

Recently the making of cottage cheese has received considerable attention from some of our instructors in cheese making, as this article is gradually assuming considerable importance in the disposal of our dairy products. People that have a considerable amount of milk can almost always sell cottage cheese at a good price if it is properly made. It is even appearing in some of our city stores devoted to the selling of delicacies for the table. Skimmilk only should be used, as the butterfat in the whole milk is too valuable to be disposed of in this way. The selling price of cottage cheese is based on the presumption that it is made of skimmilk and it would therefore be inadvisable to make it of a more expensive substance.

For the making of cottage cheese the skimmilk should be kept at a temperature of 70 to 75 degrees for one to two days from the time the milk is drawn. By that time it will be well curdled. The sour milk should be heated to about 90 degrees Fahrenheit and kept at that temperature till the whey begins to appear. The whey will become clear in from fifteen to twenty minutes after that temperature is reached. This temperature will be a surprise to most of our readers who have been in the habit of almost boiling the milk in the making of cottage cheese. But the high temperature produces a hard cheese that is not so desirable or palatable as that made at a temperature of 90 degrees.

When the whey is clear the cheese is put into muslin bags and allowed to drain till the whey is nearly all out of it, or as much out of it as will run. Then the cheese is made up into balls and put into oiled paper and made ready for the market. The salting, which must be done while the curd is in the mass, should be at the rate of one pound of salt to 100 pounds of cheese. In making a high quality of cheese it is advised by some makers to put in about one ounce of cream to one pound of cheese, before it is made up into balls.

Flavor and texture make the salable value of cottage cheese. The flavor should be that of mildly sour milk. There should be in it no bitter taste or flavor of the stable. It is always best to taste the sour milk before using it for this purpose, to make sure that it contains no flavor that would be objectionable. When the cheese is found to be too sour it is probable that it is due to the presence of too much whey and that the heating was not continued long enough to permit the complete separation of the whey. When the sour milk is heated above 100 degrees the cheese is rendered too dry and the texture crumbly. Care must be taken to insure a temperature of at least 90 degrees, as in the case of a temperature below that the whey will not drain out sufficiently and the cheese will be mushy and soft.

Thin or Fat Brood Sows

It is a mistake to keep a brood sow too fat, and it is a greater mistake to keep her too thin. During pregnancy we must keep two things in mind: One is that the sow is keeping up her bodily strength, and the other is that she is nourishing a foetus on the food she receives. Feeding should therefore be liberal, though it need not be quite so heavy as after farrowing. She should be kept in a good condition, neither too fat nor too lean. If there is to be an error on either side it should be on the side of overfatness. We have heard the advice given to keep the brood sow lean. This is an error of the worst kind, but it is one that is often allowed to become the trite saying of a neighborhood. Like many other trite sayings that are accepted on their face, there is no truth in it. If the brood sow is kept thin the pigs will lack stamina, and they may never recover from this backset they received before birth. Fasting does not enable a sow to bring forth a strong litter of pigs, and this statement should appeal to every man's intelligence. The unborn pig must be remembered when we are feeding the dam. It is unlikely that a balanced ration will make the dam fat while she is carrying a litter. When sows are made overfat at that period it is doubtless due to feeding a ration greatly overbalanced on the side of carbohydrates. It is practically impossible to make a brood sow too fat by feeding her a large ration properly balanced. With this feeding, the sow should have an abundance of exercise, and with that there is little or no danger of too much fat being accumulated.

Land in which seeds are sown should never be permitted to become puddled. Puddling is brought about by water standing on the ground till the soil has become like putty. The oxygen is thus shut off from the seeds, and they cannot germinate. This has been again and again demonstrated by "puddling" one part of a planted plot and leaving another unpuddled. Seeds to grow must have air as well as water.

One of the best drouth preventers is a good supply of humus in the soil.